

# Chain lubrication for farm machinery



Automated chain lubrication  
pays off

- Less wear
- Greater operational reliability
- Lower risk of failure

## Leave nothing to chance

Chains are among the most important power transmission elements in farm machinery, and they must be carefully maintained. The traditional, manual method of lubrication carries a risk of inadequate lubrication. This results in premature wear and impairs the chain's operation. The costs associated with a chain failing due to insufficient lubrication

are both inconvenient and usually very substantial. It does not have to be this way, though. You are always on the safe side with automated SKF chain lubrication systems, which reliably provide driving chains with optimum lubrication.

## Chains and chain wheels like it smooth

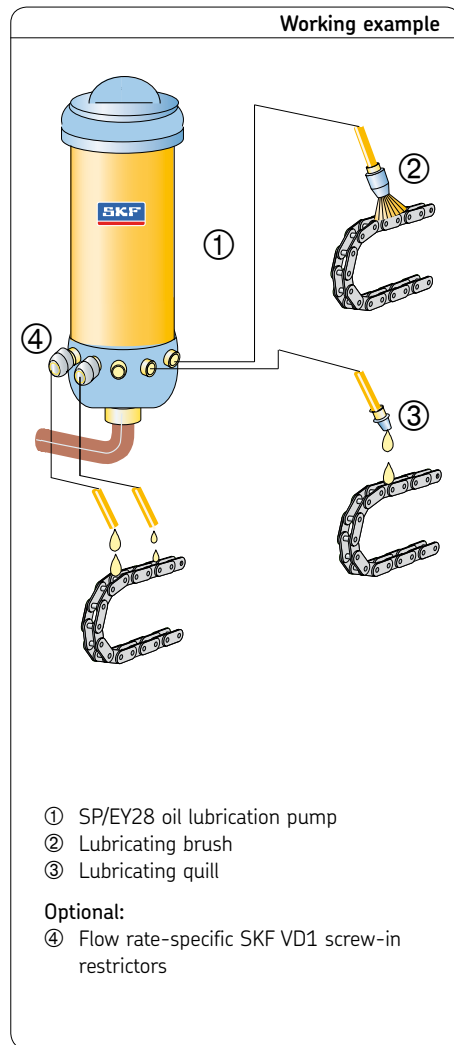
Automated systems periodically relubricate the driving chains while the farm machine is operating. Just how this works is shown using a hydraulically driven SKF chain lubrication system as an example. Our system utilizes the farm machine's hydraulic system to build up the pump pressure required for lubrication. Screw-in restrictors are optionally employed to divide the lubricant and can be used to regulate the flow rate.

As soon as the chain drive is turned off, which also relieves the hydraulic system, the spring-loaded main metering piston of the hydraulically driven oil lubrication pump is pushed to its initial position. The metering chamber is refilled with oil again and is thus ready for the next metering stroke.

All standard lubricating oils with a mineral or synthetic base can be used.

The metered oil is fed directly to the chain through pipes which have lubricating quills or lubricating brushes at their end.

The lubricating brushes ensure that the lubricant is applied equally across the entire width of the roller, which provides an optimum supply of creeping lubricant to chain link plates and pins and chain rollers.



## Advantages of automated SKF chain lubrication systems

- An economical system that pays for itself
- Efficient resource handling
- No unnecessary environmental pollution
- Exact adherence to lubrication intervals
- Exact metering of lubricant
- Extension of chain service life
- Increase in operational reliability
- Increase in wear resistance
- Reduction in risk of failure

## Fields of application

Spreaders, loading wagons, self-loading forage wagons, silage wagons, tipper trailers with hydr. tailgate, etc.

SKF recommends that biodegradable oils be used for reasons of environmental compatibility. Please also note the important information on product usage on the back cover.

## Three systems, one signature

You can select the SKF system which you want to use, depending on the design of your farm machine. Hydraulic, pneumatic or mechanically operated oil lubrication pumps – all SKF systems have high operational reliability in common, even under extreme operating conditions and harsh ambient conditions. There is a simple reason for this:

the mature designs, the compact forms, the materials used and the precision manufacture of the systems bear the signature of a company with more than 80 years of experience in the field of lubrication. The sturdy and reliable systems from SKF are characterized by their excellent value for the money.

They are easy to operate, easy to install and, thanks to their compact construction, can be used in almost all farm machines.

Our employees will be glad to help you find your individual solution for chain lubrication.

Hydraulic oil lubrication pump



SP/EY28

Pneumatic oil lubrication pump



POEP-15-1.0

Mechanically actuated oil lubrication pump



TZ1-KPK001 with K1 reservoir

### Technical data

Drive	hydraulic
Reservoir capacity	1.0 liter
Drive pressure	60 to max. 200 bars
Drive volume	> 1.5 l/min.
Delivery volume per stroke	4.5, 6.0 or 7.0 cm <sup>3</sup> <sup>1)</sup>
Lubricant outputs	1 to 9
Pumped medium	mineral, synthetic and environment compatible oils; operating viscosity 20 to 1500 mm <sup>2</sup> /s

See brochure 1-5001-EN for information on metering using additional restrictors.

<sup>1)</sup> Other specifications available on request

### Technical data

Drive	pneumatic
Reservoir capacity	0.5; 1.0; 1.7 liters
Drive pressure	3 to 10 bars
Delivery volume per stroke	15 cm <sup>3</sup>
Pumped medium	mineral, synthetic and environment compatible oils; operating viscosity 20 to 1500 mm <sup>2</sup> /s

See brochure 1-5001-EN for information on metering using external metering elements.

### Technical data

Drive	mechanical, e.g. by Excenter
Reservoir	external 1.0 liter <sup>1)</sup>
Delivery volume per stroke	0.2 to 1.1 cm <sup>3</sup>
Pumped medium	mineral, synthetic and environment compatible oils; operating viscosity 20 to 1500 mm <sup>2</sup> /s

See brochure 1-5006-EN for information on the complete setup with pressure regulating valve and metering using external restrictors

**Order number: 1-0974-EN**

Subject to change without notice. (10/2009)

**Important product usage information**

All products from SKF may be used only for their intended purpose as described in this brochure and in any instructions. If operating instructions are supplied with the products, they must be read and followed.

Not all lubricants are suitable for use in centralized lubrication systems. SKF does offer an inspection service to test customer supplied lubricant to determine if it can be used in a centralized system. SKF lubrication systems or their components are not approved for use with gases, liquefied gases, pressurized gases in solution and fluids with a vapor pressure exceeding normal atmospheric pressure (1013 mbars) by more than 0.5 bar at their maximum permissible temperature.

Hazardous materials of any kind, especially the materials classified as hazardous by European Community Directive EC 67/548/EEC, Article 2, Par. 2, may only be used to fill SKF centralized lubrication systems and components and delivered and/or distributed with the same after consulting with and receiving written approval from SKF.

**Further brochures**

- 1-0103-EN Fittings and Accessories
- 1-0103-1-EN Quick Connectors
- 1-5001-EN Piston distributors and metering units for single-line systems
- 1-5006-EN Circulating Lubrication Systems (Oil)1-9201-EN Transport of Lubricants in Centralized Lubrication Systems

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